

Applicants: Ulrich Laemmli and Samuel Janssen
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In The Claims

Please amend the subject application pursuant to 37 C.F.R. §1.121 as changed in 68 Fed. Reg. 38611.

Please cancel Claim 86 without prejudice or disclaimer of the subject matter contained therein.

Please amend the following Claims:

1. (previously presented) A DNA-binding molecule which binds specifically to a minor groove of double-stranded DNA, comprising at least two sequence specific DNA-binding elements, covalently linked to each other in tandem orientation by an amphipathic, flexible linker molecule, wherein at least one of said DNA binding elements is non-proteinaceous.
2. (previously presented) The DNA-binding molecule according to claim 1 wherein at least one of the DNA-binding elements comprises an oligomer comprising one or more organic heterocyclic amino-acid residues.
3. (previously presented) The DNA-binding molecule according to claim 2 wherein each organic heterocyclic residue has at least one annular nitrogen, sulphur or oxygen.
4. (previously presented) The DNA-binding molecule according to claim 2, wherein said heterocyclic residue is chosen from pyrrole, imidazole, triazole, pyrazole, furan, thiazole, thiophene, oxazole, pyridine, and any one of these compounds having one or more substituted heteroatoms.
5. (previously presented) The DNA-binding molecule according to claim 4, wherein said heterocyclic

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residues are chosen from the group consisting of N-methylpyrrole (PY), 3-hydroxy N-methylpyrrole (HP) and N-methylimidazole.

6 - 50. (Canceled)

51. (previously presented) A process for binding double-stranded DNA in a sequence-specific manner, comprising contacting a DNA-target sequence within said DNA with a DNA-binding molecule according to claim 1, in conditions allowing said binding to occur.

52. (previously presented) The process according to claim 51 which is carried out *in vivo*, *in vitro* or *ex vivo*.

53. (previously presented) The process according to claim 52 which is carried out in a cell.

54. (previously presented) The process according to claim 53, wherein said cell is eukaryotic.

55. (previously presented) The process according to claim 53, wherein said cell is prokaryotic.

56. (previously presented) The process according to claim 54, wherein said cell is a vertebrate cell, an invertebrate cell, a plant cell.

57. (previously presented) The process according to claim 54, wherein said cell is a mammalian cell, an insect cell, or a yeast cell.

58 - 68. (Canceled)

69. (previously presented) A process for modulating chromosome function in a eukaryotic cell, comprising the step of contacting a genomic DNA element

comprising a binding site mediating chromosome function, with a molecule according claim 1 and which binds in a sequence-specific manner to said element, said step of contacting being carried out in conditions permitting binding of said molecule to said element, wherein the binding modulates chromosome function.

70. (previously presented) A process for modulating the function of a DNA element in a eukaryotic cell, comprising the step of contacting a genomic <chromatin responsive element (CRE), with a molecule according to claim 1 and which binds in a sequence-specific manner to said CRE, said step of contacting being carried out in conditions permitting chromatin remodeling of the CRE by said molecule, wherein said chromatin remodeling of the CRE alters the activity of one or more other modulated DNA elements in the genome.

71. (previously presented) A cell containing a DNA-binding molecule according to any one of claims 1 to 5.

72. (previously presented) The cell according to Claim 71, wherein said DNA-binding molecule binds the DNA-minor groove.

73 - 78. (Canceled)

79. (previously presented) A pharmaceutical composition comprising the DNA-binding molecule according to claim 1 in association with a physiologically acceptable excipient.

80. (Cancelled)

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81. (previously presented) A DNA-binding molecule according to claim 1 which is fluorescent or fluorescently labeled.

82. (previously presented) The DNA-binding molecule according to Claim 81, wherein the fluorescent label is a fluorescent dye selected from the group consisting of fluorescein, dansyl, Texas red, isosulfan blue, ethyl red, malachite green, rhodamine and cyanine dyes.

83 - 85. (Canceled)

86. (Canceled)